APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/495,759	02/01/2000	Ramin C. Nakisa	7741.00	5260

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EXAMINER
YOUNG, JOHN L

ART UNIT	PAPER NUMBER
2162	

DATE MAILED: 04/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/495,759	Nakis
	Examiner	Art Unit
	John Young	2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___*3*___ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will
  be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this
  communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Feb 1, 2000* _____ .

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-12* _____ is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-12* _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    a) ☒ All b) ☐ Some* c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). ___*5*___

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other: _____

FIRST ACTION REJECTION

DRAWINGS

1.   This application has been filed with drawings that are considered informal; however, said

drawings are acceptable for examination and publication purposes. The review process for

drawings that are included with applications on filing has been modified in view of the new

requirement to publish applications at eighteen months after the filing date of applications, or any

priority date claimed under 35 U.S.C. §§119, 120, 121, or 365.

CLAIM REJECTIONS — 35 U.S.C. §103(a)

The following are quotations of 35 U.S.C. §103 (a) which form the basis of the

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not
> identically disclosed or described as set forth in section 102 of this
> title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject
> matter pertains. Patentability shall not be negatived by the manner
> in which the invention was made.

2.   Independent claims 1 & 7 and dependent claims 2-3, 5-6, 8-9 & 11-12 are rejected under

35 U.S.C. §103(a) as being unpatentable over Kramer 6,327,574 (12/04/2001) [US f/d:

02/01/1999] (herein referred to as "Kramer").

in view of <u>Walker</u> 6,112,185 (08/29/2000) [US f/d: 06/30/1997] (herein referred to as "<u>Walker</u>

'<u>185</u>").

As per claim 1, <u>Kramer</u> (the ABSTRACT; FIG. 3B; FIG. 5A; FIG. 5B; FIG. 6;

FIG. 7; FIG. 8; FIG. 10; FIG. 17; FIG. 18; col. 1, ll. 15-18; col. 1, ll. 23-40; col. 2, ll. 46-

65; col. 5, ll. 5-25 col. 13, ll. 20-67; and col. 14, ll. 1-67) shows elements that suggest:

"A method of advertising over a communications network comprising a plurality of

interactive customer subscriber sites interconnected with an advertising information server

site . . . providing, at the interface advertising information server site, interactive

advertising desplays incorporating the one or more role models; establishing an interactive

communication link from the customer subscriber sites t the advertising information server

site enabling customers to access the displays and to make purchases in response to the

displays. . . ."

<u>Kramer</u> lacks an explicit recitation of "A method of advertising over a

communications network comprising a plurality of interactive customer subscriber sites

interconnected with an advertising information server site . . .providing, at the interface

advertising information server site, interactive advertising displays incorporating the one

or more role models; establishing an interactive communication link from the customer

subscriber sites t the advertising information server site enabling customers to access the

displays and to make purchases in response to the displays. . . ." even though <u>Kramer</u>

(the ABSTRACT; FIG. 3B; FIG. 5A; FIG. 5B; FIG. 6; FIG. 7; FIG. 8; FIG. 10; FIG. 17;

FIG. 18; col. 1, ll. 15-18; col. 1, ll. 23-40; col. 2, ll. 46-65; col. 5, ll. 5-25 col. 13, ll. 20-67; and col. 14, ll. 1-67) suggets same.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the disclosure of Kramer (the ABSTRACT; FIG. 3B; FIG. 5A; FIG. 5B; FIG. 6; FIG. 7; FIG. 8; FIG. 10; FIG. 17; FIG. 18; col. 1, ll. 15-18; col. 1, ll. 23-40; col. 2, ll. 46-65; col. 5, ll. 5-25 col. 13, ll. 20-67; and col. 14, ll. 1-67) would have been selected in accordance with "A method of advertising over a communications network comprising a plurality of interactive customer subscriber sites interconnected with an advertising information server site . . . providing, at the interface advertising information server site, interactive advertising displays incorporating the one or more role models; establishing an interactive communication link from the customer subscriber sites t the advertising information server site enabling customers to access the displays and to make purchases in response to the displays. . . ." " because such selection would have provided a means that *"overcomes the limitations of conventional models and targeting methods for delivering custom content to consumers that matches their interests, preferences, demographics, or psychographics."* (See Kramer (col. 2, ll. 45-55)).

Kramer (the ABSTRACT; col. 2, ll. 55-67; col. 3, ll. 22-50; col. 22, ll. 15-40; and col. 35-65) shows elements that suggest "storing the attributes of a plurality of customers in the form of customer attribute vectors c_k. . . . storing the attributes of one or more role models in the form of one or more role model attribute vectors i_j . . .defining a marketing function m which maps the customer attribute vectors to the one or more role model

attribute vectors such that $i_j = M(c_k)$ . . . updating the marketing function M in dependence upon the customer purchases."

Kramer lacks an explicit recitation of "storing the attributes of a plurality of customers in the form of customer attribute vectors c_k . . . storing the attributes of one or more role models in the form of one or more role model attribute vectors i_j . . .defining a marketing function m which maps the customer attribute vectors to the one or more role model attribute vectors such that $i_j = M(c_k)$ . . . updating the marketing function M in dependence upon the customer purchases. . . ." even though Kramer (the ABSTRACT; col. 2, ll. 55-67; col. 3, ll. 22-50; col. 22, ll. 15-40; and col. 35-65) suggests same.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the disclosure of Kramer (the ABSTRACT; col. 2, ll. 55-67; col. 3, ll. 22-50; col. 22, ll. 15-40; and col. 35-65) would have been selected in accordance with "storing the attributes of a plurality of customers in the form of customer attribute vectors c_k . . . storing the attributes of one or more role models in the form of one or more role model attribute vectors i_j . . .defining a marketing function m which maps the customer attribute vectors to the one or more role mode l attribute vectors such that $i_j = M(c_k)$ . . . updating the marketing function M in dependence upon the customer purchases. . . ." because such selection would have provided a means that *"overcomes the limitations of conventional models and targeting methods for delivering custom content to consumers that matches their interests, preferences, demographics, or psychographics. . . ."* (See Kramer (col. 2, ll. 45-55)) *In particular, a detailed model of*

the consumer is built using mathematical functions that map from the specific

transactions of the consumer to estimates of the relevancy of certain attributes to the

consumer. These models can be used to order a number of pieces of conditional content

with respect to how well they match the attributes of the consumer. . . ." (See Kramer

(col. 2, ll. 60-67).

As per claim 2, Kramer shows the method of claim 1.

Kramer (the ABSTRACT; col. 2, ll. 55-67; col. 3, ll. 22-50; col. 22, ll. 15-40; and

col. 35-65) shows elements that suggest the elements and limitations of claim 2.

Kramer lacks an explicit recitation of the elements and limitations of claim 2, even

though Kramer (the ABSTRACT; col. 2, ll. 55-67; col. 3, ll. 22-50; col. 22, ll. 15-40; and

col. 35-65) suggests the elements and limitations of claim 2.

It would have been obvious to a person of ordinary skill in the art at the time of the

invention that the disclosure of Kramer (the ABSTRACT; col. 2, ll. 55-67; col. 3, ll. 22-

50; col. 22, ll. 15-40; and col. 35-65) would have been selected in accordance with "the

role model constitutes one of a plurality of such role models, the step of defining a

marketing function M which maps the customer attribute vectors c_k to the role model

attribute vectors i_j includes defining a plurality of marketing functions M which map

customer attribute vectors c_k to a plurality of role model attributes vectors i_j , and the step

of updating the marketing function M n dependence upon the customer purchases includes

the step of learning the mapping from the vectors c_k to the vectors i_j to maximize sales. . .

." because such selection would have provided a means that *"overcomes the limitations of conventional models and targeting methods for delivering custom content to consumers that matches their interests, preferences, demographics, or psychographics. . . . "* (See <u>Kramer</u> (col. 2, ll. 45-55)) *In particular, a detailed model of the consumer is built using mathematical functions that map from the specific transactions of the consumer to estimates of the relevancy of certain attributes to the consumer. These models can be used to order a number of pieces of conditional content with respect to how well they match the attributes of the consumer, and hence how well they may appeal to the consumer's interests. . . . "* (See <u>Kramer</u> (col. 2, ll. 60-67).

As per claim 3, <u>Kramer</u> shows the method of claim 2.

<u>Kramer</u> (FIG. 8; FIG. 9; FIG. 10) discloses *"BOOLEAN MATCHING"*; the Examiner interprets this disclosure as being equivalent to a genetic algorithm to evolve the mapping function.

<u>Kramer</u> lacks an explicit recital of the elements and limitations of claim 3.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the disclosure of <u>Kramer</u> (FIG. 8; FIG. 9; FIG. 10) would have been selected in accordance with "wherein the step of learning the mapping from the vectors c_k to the vectors i_j comprises using a genetic algorithm to evolve the mapping function. . . ." because such selection would have provided a means that *"overcomes the limitations of conventional models and targeting methods for delivering custom content to consumers*

that matches their interests, preferences, demographics, or psychographics. . . ."

(See <u>Kramer</u> (col. 2, ll. 45-55)) *In particular, a detailed model of the consumer is built using mathematical functions that map from the specific transactions of the consumer to estimates of the relevancy of certain attributes to the consumer. These models can be used to order a number of pieces of conditional content with respect to how well they match the attributes of the consumer, and hence how well they may appeal to the consumer's interests. . . . "* (See <u>Kramer</u> (col. 2, ll. 60-67) and because Boolean algorithms can be considered a generic algorithmic format.

As per claim 5, <u>Kramer</u> shows the method of claim 2.

<u>Kramer</u> (col. 26, ll. 20-67) discloses *"Bayesian . . . mapping. . . . with . . . conditional probabilities. . . ."*

<u>Kramer</u> lacks an explicit recital of the elements and limitations of claim 5.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the disclosure of <u>Kramer</u> (col. 26, ll. 20-67) would have been selected in accordance with "wherein the step of learning the mapping from the vectors c_k to the vectors i_j comprises treating parameters of the marketing function as probability distributions and using Bayesian inference to find the posterior distribution of the marketing function parameters. . . ." because such selection would have provided a means that *"overcomes the limitations of conventional models and targeting methods for delivering custom content to consumers that matches their interests, preferences,*

demographics, or psychographics. . . ." (See <u>Kramer</u> (col. 2, ll. 45-55)) *In particular, a*

detailed model of the consumer is built using mathematical functions that map from the

specific transactions of the consumer to estimates of the relevancy of certain attributes to

the consumer. These models can be used to order a number of pieces of conditional

content with respect to how well they match the attributes of the consumer, and hence

how well they may appeal to the consumer's interests. . . ." (See <u>Kramer</u> (col. 2, ll. 60-

67).

As per claim 6, <u>Kramer</u> shows the method of claim 2.

<u>Kramer</u> (FIG. 12b; and col. 28, ll. 40-67) discloses *"statistical regression on*

existing data. . . ."; the Examiner interprets this disclosure as suggesting "using non-linear

regression to map c_k. . . ."

<u>Kramer</u> lacks an explicit recital of the elements and limitations of claim 6.

It would have been obvious to a person of ordinary skill in the art at the time of the

invention that the disclosure of <u>Kramer</u> (FIG. 12b; and col. 28, ll. 40-67) would have been

selected in accordance with "wherein the step of learning the mapping from the vectors c_k

to the vectors i_j comprises using "using non-linear regression to map c_k to i_j . . . ." because

such selection would have provided a means that *"overcomes the limitations of*

conventional models and targeting methods for delivering custom content to consumers

that matches their interests, preferences, demographics, or psychographics. . . ."

(See <u>Kramer</u> (col. 2, ll. 45-55)) *In particular, a detailed model of the consumer is built*

using mathematical functions that map from the specific transactions of the consumer to

estimates of the relevancy of certain attributes to the consumer. These models can be

used to order a number of pieces of conditional content with respect to how well they

match the attributes of the consumer, and hence how well they may appeal to the

consumer's interests. . . ." (See Kramer (col. 2, ll. 60-67).

Claim 8 is rejected for substantially the same reasons as claim 2.

Claim 9 is rejected for substantially the same reasons as claim 3.

Claim 11 is rejected for substantially the same reasons as claim 5.

Claim 12 is rejected for substantially the same reasons as claim 6.

3.   Dependent claims 4 & 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over

Kramer and further in view of Boe 6,236,975 (05/22/2001) [US f/d: 09/29/1998] (herein referred

to as "Boe").

As per claim 4, Kramer shows the method of claim 2.

Kramer (FIG. 8; FIG. 9; FIG. 10; FIG. 12b; col. 26, ll. 20-67; and col. 28, ll. 40-

67) shows elements that suggest "learning the mapping from the vectors c_k to the vectors

i_j. . . ."

Kramer lacks explicit recital of: "learning the mapping from the vectors c_k to the vectors i_j comprises using a three-layer neural network to find the mapping function b back propagation."

Boe (col. 4, ll. 5-25; col. 6, ll. 58-67; col. 7, ll. 1-10; and page 2) discloses: *"mapping. . . . attributes"* and "'Neural networks, Who we are and what we do, Genetic Algorithms, Systems, Fuzzy Logic, Artificial life, Agenda, Book reviews,' 11 pgs, 195.240.38.150/hccai/eng_al.htm, Aug.7, 1997."

Boe proposes neural network and genetic algorithm modifications that would have applied to the method of Kramer. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Boe with the method of Kramer because such combination would have allowed "a business . . . [to] obtain information from customers that allows the business to target its marketing efforts to specific products and services to specific customers who are more likely than the general population to purchase those products and services." (See Boe (col. 1, ll. 58-65)).

Claim 10 is rejected for substantially the same reasons as claim 4.

CONCLUSION

4.   Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Any response to this action may be sent via facsimile to either:

(703) 746-7239 or (703) 872-9314 (for formal communications EXPEDITED PROCEDURE) or

(703) 746-7239 (for formal communications marked AFTER-FINAL) or

(703) 746-7240 (for informal communications marked PROPOSED or DRAFT). Hand
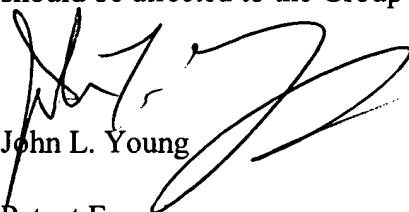
delivered responses may be brought to:

> Sixth floor Receptionist
> Crystal Park II
> 2121 Crystal Drive
> Arlington, Virginia.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to John L. Young who may be reached via telephone at (703) 305-3801. The

examiner can normally be reached Monday through Friday between 8:30 A.M. and 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's

supervisor, Eric Stamber, may be reached at (703) 305-8469.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 305-3900.

John L. Young
Patent Examiner

March 25, 2002